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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/009,550	11/05/2001	Karl Hehl	MAY-0016	1540

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EXAMINER

HEITBRINK, TIMOTHY W

ART UNIT	PAPER NUMBER
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1722

DATE MAILED: 07/08/2003

9

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/009,550

Applicant(s)

HEHL, KARL

Examiner

Tim Heitbrink

Art Unit

1722

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 May 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) 10 and 13-17 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-9, 11 and 12 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 3, 6. 6) ☐ Other:

Art Unit: 1722

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-3,5,8,11,12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tamaki in view of Inaba et al.

Tamaki et al. disclose a injection mold clamping apparatus used in combination with an injection molding machine. Tamaki further disclosing in column 2, a linear motor 30 made up of a stator 32 and a linear armature 34 used to clamp mold sections 22 and 26.

While Tamaki et al. do not disclose an electric operated injection molding machine, Inaba et al. discloses an electrically operated injection molding machine for the purpose of having a simple and compact apparatus.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the electrically operated injection molding machine of Inaba et al. in combination with the injection clamping apparatus of Tamaki et al. in order to produce a simple and compact apparatus as suggested by Inaba et al.

Claims 4 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tamaki et al. in view of Inaba et al. as applied to claims 1-3,5,8,11,12 above, and further in view of EP 361670.

Art Unit: 1722

While Tamaki et al. (as modified by Inaba et al.) uses a magnet and stator combination made up of two cylinders, using a magnet and stator combination made up of three cylinders to provide reciprocal motion is well known in view of EP 361670.

Thus, it would have been obvious to one having ordinary skill in the art at the time was made to provide an additional magnet and stator cylinder in the apparatus of Tamaki et al. in order to provide reciprocal motion as suggested by EP 361670.

Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Tamaki et al. in view of Inaba et al. as applied to claims 1-3,5,8,11 and 12 above, and further in view of Linearmotoren LinMot P.

While Tamaki et al. (as modified by Inaba et al.) does not disclose stator windings divided along an axis of movement into a plurality of separate electrical switching zones, Linearmotoren LinMot P shows stator windings divided into a plurality of separate switching zones based on their position.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to divide the stator windings into switching zones based on their position as suggested by Linearmotoren LinMot P.

Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Tamaki et al. in view of Inaba et al. as applied to claims 1-3,5,8,11 and 12 above, and further in view of New Linear Motors and its applications.

While Tamaki et al. (as modified by Inaba et al.) does not cooling ducts used adjacent the stator windings, New Linear Motors and its applications discloses cooling

Art Unit: 1722

pipes imbedded in a stator core for the purpose of maintaining the stator winding at an appropriate temperature.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide cooling ducts in the stator windings of Tamaki et al. in order to maintain the windings at an appropriate temperature as suggested by New Linear Motors and its applications.

Applicant's election with traverse of claims 1-9 and 11 (claim 12 added by the Examiner) in Paper No. 8 is acknowledged. The traversal is on the ground(s) that under MPEP Appendix A1, unity of invention is to be considered only in relation to independent claims and not dependent claims. This is not found persuasive because if it can be shown that one species is not novel, lack of unity can be maintained. See Annex. B, section (f)(v) on Markush practice (page AI-64).

The requirement is still deemed proper and is therefore made FINAL.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tim Heitbrink whose telephone number is 703-308-3789. The examiner can normally be reached on Tuesday-Friday 5:30-4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wanda Walker can be reached on 703-308-0457. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9310 for regular communications and 703-872-9311 for After Final communications.

Art Unit: 1722

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.



Tim Heitbrink
Primary Examiner
Art Unit 1722

7-2-03

twh
July 2, 2003